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Subject:

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Eleventh Semi-Annual Progress Report (February 2012 to July 2012)

SEDIMENTS

Dear Jim:

Date:
August 15, 2012

Attached is the eleventh semi-annual progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Supplemental Remedial Investigations/ Feasibility Studies (SRI/FS). This progress report is submitted as per Section 7.2 of the Statement of Work (SOW) for the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Remedial Investigations/ Feasibility Studies (Docket No. V-W-07-C-864). Per Section 7.2 of the SOW, the semi-annual progress reports "shall address all areas of the Site where Respondents perform SRI/FS activities and shall summarize overall progress in completing the work required by the AOC and SOW".

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Also attached is the master schedule for SRI/FS activities at the Site, which has been reviewed and updated, as necessary as per Section C of Exhibit A of the SOW.

Our ref:
B0064539.0003.00014
#2

Please note that as described on page 1 of the semi-annual report, ARCADIS has confirmed that our insurance policy is maintained for the required amounts, the policy has not changed, and that the United States Environmental Protection Agency (USEPA) is listed as additional insured as required under paragraph 92 of the AOC.

If you have any questions, please do not hesitate to contact me.

Sincerely,

ARCADIS

Michael J. Erickson, P.E.
Vice President

Attachments

Copies:

Michael Berkoff, USEPA
Sam Borries, USEPA
Paul Bucholtz, MDEQ
Sharon Hanshue, MDNR
Jeff Keiser, CH2M HILL
Todd Goeks, NOAA
Jessica Winter, NOAA
Richard Gay, Weyerhaeuser Company
Martin Lebo, Ph.D., Weyerhaeuser Company
Kathy Huibregtse, ENVIRON
Garry Griffith, P.E., Georgia-Pacific LLC

**SEMI-ANNUAL PROGRESS REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE SRI/FS**

REPORT #11, FEBRUARY 2012 TO JULY 2012

**PREPARED BY ARCADIS
ON BEHALF OF GEORGIA-PACIFIC LLC**

SUBMITTED TO

**JAMES SARIC, REMEDIAL PROJECT MANAGER
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Semi-Annual Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRI/FS**

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Areas of the Site where SRI/FS Activities Have Been Performed Pursuant to the AOC and SOW

- Operable Unit 5 (OU 5) – Kalamazoo River from Morrow Dam to Lake Michigan and Portage Creek from Alcott Street to the confluence.

Summary of Overall Progress in Completion Work Required by the AOC and SOW – Area 1, Area 2, Area 3, Area 4, and Multi-Area

AOC Requirements

- As discussed in Section 28b of the AOC, USEPA and Michigan Department of Environmental Quality (MDEQ) were notified in advance of sample collection activities.
- The six monthly progress reports generated during the February 2012 to July 2012 period were submitted on time, as required by Section 27 of the AOC and Section 7.1 of the SOW.
- The Semi-Annual Progress Report for the period from August 2011 to January 2012 was submitted on March 23, 2012 as required by Section 7.2 of the SOW.
- The Annual Area Work Report for Areas 3 through 7 was submitted on March 23, 2012 as required by Section 1.1.1 of the SOW.
- As discussed in Section 48a of the AOC, the validated data that have been generated to date have been submitted as part of the monthly progress reports.
- On April 12, USEPA forwarded to ARCADIS the OU 5 cost recovery package for 2011 as per Section XVIII of the AOC.
- On June 14, Georgia-Pacific LLC (Georgia-Pacific) submitted a letter to USEPA confirming ARCADIS' insurance coverage amounts. On June 29, USEPA provided to Georgia-Pacific written confirmation that this submittal complies with paragraph 92 of the AOC.
- On June 25, Georgia-Pacific made a partial payment to USEPA regarding the April 12, 2012 cost recovery package for OU 5.
- On July 10, USEPA forwarded to Georgia-Pacific the CH2M HILL backup for the April 2012 cost recovery packages for the Willow Boulevard/A-Site Operable Unit and OU 5. On July 27, ARCADIS provided to USEPA comments on the OU 5 cost recovery package.

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SOW Requirements

Task 1. Project Scoping and SRI/FS Planning Documents

Submittals approved by USEPA and finalized:

- On February 22, USEPA approved the fly over survey plan proposed for the *Area 4 Supplemental Remedial Investigation/Feasibility Study Work Plan* development.
- On April 2, USEPA approved the archived Area 2 soil and sediment samples proposed for supplemental non-polychlorinated biphenyl (PCB) analysis.
- On May 10, USEPA approved the *Area 3 Supplemental Remedial Investigation/Feasibility Study Work Plan*.
- On May 29, USEPA approved the proposed *Area 2 Supplemental Soil and Sediment Field Sampling Plan*.
- On June 8, USEPA notified ARCADIS that it would issue no further comments for the *Former Plainwell Impoundment and Plainwell No. 2 Dam Area Spring 2011 Bank Conditions Monitoring Report*.
- On June 26, USEPA approved the *Area 3 Proposed Reconnaissance Plan*.

Activities toward completion of other requirements:

- On February 8, ARCADIS forwarded to USEPA an updated copy of the entire Kalamazoo River Site-wide database.
- On March 13, representatives of Georgia-Pacific, USEPA, and MDEQ met in Detroit, MI to discuss Area 2 data adequacy.
- On March 21, ARCADIS held a conference call with CH2M HILL, representing USEPA, to discuss preliminary remedial goals for Area 1.
- On March 23, MDEQ forwarded to ARCADIS its proposed data quality and supplemental sampling needs for the Area 2 SRI/FS.
- On March 27, ARCADIS requested from USEPA the percent solids data for USEPA samples collected in the former Plainwell Impoundment and the Otsego City Impoundment by Roy F. Weston, Inc. in 2001.

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- On April 2, Dr. Sean Kennedy of the University of Ottawa hosted a webinar regarding his avian PCB sensitivity research results. Representatives of USEPA, U.S. Fish and Wildlife Service, MDEQ, and the Michigan Department of Natural Resources participated. ARCADIS transmitted the meeting slides to USEPA on April 10.
- On April 18, USEPA forwarded to ARCADIS a Freedom of Information Act-requested documents list for the project.
- On May 7, ARCADIS forwarded to John Kern, Ph.D. of KERN Statistical Services, Inc. lists of species that have been genetically sequenced to date by Dr. Sean Kennedy of the University of Ottawa and a list of species identified at the Site.
- On May 15, ARCADIS forwarded to USEPA and MDEQ the conceptual layout for soil sampling and focused reconnaissance in Area 3.
- On July 17, ARCADIS transmitted to USEPA and MDEQ data maps for Area 2.
- On July 30, MDEQ forwarded to ARCADIS summary materials regarding former Plainwell Impoundment channel stability issues.
- On July 30, the Trustees were notified by ARCADIS that the annual site walk of the former Plainwell Impoundment and Plainwell No. 2 Dam Area is scheduled for August 30.

Submittals awaiting completion:

- On June 27, USEPA provided conditional approval of the revised *Area 1 Supplemental Remedial Investigation Report* (Area 1 SRI Report) and responses to comments. On July 24, USEPA provided ARCADIS with e-mail acceptance of the Area 1 SRI Report final responses to comments provided to USEPA on July 17. ARCADIS expects to submit the final Area 1 SRI Report to USEPA at the end of August.

Task 2. Site Characterization

- On April 5, ARCADIS received the data from Prein & Newhof for the topographic survey performed in March of 12 transect locations in the former Plainwell Impoundment and 14 transect locations in the Plainwell No. 2 Dam Area as part of the 2012 bank monitoring activities.
- On April 10, ARCADIS notified USEPA about the submission of the approved selection of archived Area 2 soil and sediment samples for non-PCB analysis.

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- On April 12, ARCADIS submitted the approved selection of archived Area 2 soil and sediment samples to TestAmerica Laboratories, Inc. (TestAmerica) for non-PCB analysis.
- During the week of April 23, Cardno JFNew performed herbicide treatment of reed canary grass and other invasive weeds in the former Plainwell Impoundment and the Plainwell No. 2 Dam Area.
- On April 30, Cardno JFNew began to replant trees and shrubs in the Plainwell No. 2 Dam Area and Mateco Drilling Company (Mateco) began monitoring well removal in the former Plainwell Impoundment.
- On May 3, ARCADIS completed the annual inspection of vegetation and banks as a part of the *Former Plainwell Impoundment and Plainwell No. 2 Dam Area 2012 Bank Conditions Monitoring Report* (2012 Bank Conditions Monitoring Report). The results of this inspection will be included in the draft 2012 Plainwell Bank Conditions Monitoring Report.
- On May 3, Mateco removed monitoring wells in the former Plainwell Impoundment.
- On May 11, Cardno JFNew replanted trees and shrubs in the Plainwell No. 2 Dam Area.
- During the week of June 4, ARCADIS performed additional supplemental soil and sediment sampling in Area 2 with oversight by representatives of USEPA and MDEQ. Samples were submitted to TestAmerica for PCB, grain size, and total organic carbon.
- During the week of June 25, ARCADIS performed floodplain and sediment reconnaissance activities in the former Otsego Impoundment (Area 3) with oversight by representatives of USEPA and MDEQ.
- During the week of July 9, ARCADIS completed Pine Creek sediment reconnaissance activities in the former Otsego Impoundment (Area 3). This included collection of four additional cores and processing of all ten cores from the Pine Creek impoundment. Representatives of MDEQ provided oversight.

Task 3. Remedial Investigation Report (including ecological and human health risk assessment)

- On February 1, USEPA approved the responses to all comments on the draft Area 1 SRI Report except specific comments #9, 13, and 26.
- On February 9, ARCADIS transmitted to USEPA draft responses to USEPA's specific comments #9, 13, and 26 on the draft Area 1 SRI Report.

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- On February 14, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ participated in a conference call to discuss responses to MDEQ comments on the draft Area 1 SRI Report. On this date, ARCADIS also forwarded to MDEQ proposed responses to MDEQ's comments on the draft Area 1 SRI Report.
- On February 15, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ participated in a conference call to discuss the responses to MDEQ comments on the draft Area 1 SRI Report.
- On February 16, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ met to discuss the Area 2 SRI data.
- On February 16, ARCADIS forwarded to USEPA the final dispute resolution letter for the Area 1 SRI Report.
- On February 21, ARCADIS submitted the revised Area 1 SRI Report to USEPA.
- On February 22, ARCADIS forwarded to USEPA and MDEQ the responses to agency comments on the Area 1 SRI Report.
- On June 14, ARCADIS transmitted to USEPA and MDEQ the draft Area 2 SRI Report outline.
- On June 27, USEPA provided conditional approval of the revised Area 1 SRI Report and responses to comments.
- On July 10, ARCADIS forwarded to USEPA and MDEQ the draft responses to USEPA's comments on the Area 1 SRI Report.
- On July 10, ARCADIS forwarded to USEPA and MDEQ a set of draft tables that summarize data sets to be considered for the Area 2 SRI Report.
- On July 12, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ participated in a conference call to discuss USEPA's comments on the Area 1 SRI Report.
- On July 17, ARCADIS forwarded to USEPA the final responses to USEPA's comments on the Area 1 SRI Report.
- On July 23, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ participated in a meeting in Detroit, MI for preliminary planning of the Area 2 SRI Report. During this meeting, ARCADIS shared data from the most recent Area 2 non-PCB analyses and the supplemental soil and sediment PCB sampling data.

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- On July 24, USEPA provided ARCADIS with e-mail acceptance of the Area 1 SRI Report responses to comments provided to USEPA on July 17.
- On July 31, USEPA notified ARCADIS that they have no comments on the Area 2 data tables and SRI report outline.

Task 4. Treatability Studies (if needed)

- No meetings, submittals, or notifications.

Task 5. Development of Screening Alternatives (Technical Memorandum)

- On February 16, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ met to discuss the *Area 1 Alternatives Screening Technical Memorandum* (Area 1 ASTM) preparation.
- On February 21, ARCADIS distributed the slides used during the February 16 meeting to USEPA and MDEQ.
- On February 23, USEPA forwarded to ARCADIS a letter regarding the submittal date for the draft Area 1 ASTM.
- On March 12, ARCADIS forwarded to USEPA and CH2M HILL the document titled "Incorporation of USEPA Feedback on 2/16 ASTM Meeting."
- On March 13, representatives of Georgia-Pacific, USEPA, and MDEQ met in Detroit, MI to discuss the Area 1 ASTM.
- On March 26, ARCADIS forwarded to USEPA slides from the March 13 meeting.
- On March 26, USEPA forwarded to ARCADIS recommendations and comments on items that should be included in the Area 1 ASTM.
- On April 10, representatives from USEPA, MDEQ, Georgia-Pacific, and ARCADIS participated on a conference call to discuss the incorporation of USEPA requests in the Area 1 ASTM. On this date, ARCADIS also forwarded to USEPA responses to USEPA's comments/recommendations from the March 13 meeting regarding the Area 1 ASTM.
- On April 16, ARCADIS electronically submitted to USEPA the draft Area 1 ASTM.
- On April 18, ARCADIS forwarded to CDM Area 1 ASTM GIS files as requested.

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- On July 2, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ participated in a conference call to discuss initial comments on the Area 1 ASTM.
- On July 12, USEPA forwarded to ARCADIS draft comments on the Area 1 ASTM.

Task 6. Detailed Analysis of Alternatives (FS Report)

- On June 14, ARCADIS transmitted to USEPA and MDEQ the draft Area 1 Feasibility Study (FS) Report outline.
- On July 23, representatives of Georgia-Pacific, ARCADIS, USEPA, and MDEQ participated in a meeting in Detroit, MI for preliminary planning of the Area 1 FS.
- On July 31, USEPA notified ARCADIS that they have no comments on the Area 1 FS Report outline.

Task 7. Progress Reports

- The six monthly progress reports generated during the February 2012 to July 2012 period were submitted on time, as required by Section 7.1 of the SOW.
- The semi-annual report for Area 1 was submitted to USEPA on March 23, as required by Section 7.2 of the SOW.
- The Annual Area Work Report for Areas 3 through 7 was submitted to USEPA on March 23, as discussed in Section 1.1.1 of the SOW.

**Georgia-Pacific LLC
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Master Schedule 2012-2016 (Updated August 2012)**

[illegible]

| Progress Reports | |
|--|-----------------------|
| Area-Specific Monthly Progress Reports | |
| Semi-Annual Area-Specific Progress Reports | |
| Annual Area-Specific Progress Reports | |
| Morrow Dam to Plainwell Dam (Area 1) | |
| Area 1 SRI Report | 1/2 |
| Area 1 SRI Report (Submittal) | 2/21 |
| Area 1 ASTM and Feasibility Study | 4/16 |
| Area 1 ASTM (Submittal) | 7/23 |
| Area 1 FS Report Planning Meeting | 8/1 |
| USEPA comments on Area 1 ASTM | 10/30 |
| Area 1 Draft FS Report (Submittal) | |
| Otsego City Impoundment (Area 2) | |
| Area 2 Supplemental Field Sampling | |
| Area 2 Draft SRI Development | |
| Area 2 SRI Report Planning Meeting | 7/23 |
| Area 2 Draft SRI Report (Submittal) | 11/1 |
| Former Otsego Impoundment (Area 3) | |
| Area 3 Final SRI/FS Work Plan (Submittal) | 3/29 |
| Area 3 Final SRI/FS Work Plan (Approval) | 5/10 |
| Area 3 Field Investigation Activities | |
| Area 3 SRI Report | July 2013 (Estimated) |
| Area 3 SRI Report Planning Meeting | 11/29 |
| Draft Area 3 SRI Report (Submittal) | |
| Former Trowbridge Impoundment (Area 4) | |
| Area 4 SRI/FS Start Date | 9/1 |
| Area 4 SRI/FS Work Plan (Submittal) | 11/30 |
| Areas 5-7 - Allegan City, Lake Allegan, to Lake Michigan | |
| Area 5 SRI/FS Start Date | 9/1 |
| Area 5 SRI/FS Work Plan (Submittal) | 12/2 |
| Area 6 SRI/FS Start Date | 9/1 |
| Area 6 SRI/FS Work Plan (Submittal) | 12/1 |
| Area 7 SRI/FS Start Date | 9/1 |
| Area 7 SRI/FS Work Plan (Submittal) | 11/30 |

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|---------------|---------------------------------------|-----------|-------------------------------|----------|-------------------------------|
| Task Duration | <input type="text" value="00:00:00"/> | Milestone | <input type="text" value=""/> | Deadline | <input type="text" value=""/> |
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Date: Tue 8/14/12